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SODA: Seniors for Organ Donation Awareness "Increasing the Enrollment of Senior Citizens (Age 65 Years and Older) in the Ohio Donor Registry"

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"Increasing the Enrollment of Senior Citizens
(Age 65 Years and Older) in the Ohio Donor Registry"

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Abstract

Research Hypothesis: A targeted informational awareness program about organ and tissue donation to senior citizens (age >65 years) in Montgomery County, Ohio will produce an increase in the number of registered organ donors in the Ohio Donor Registry, hence, allowing more available organs for transplant for aging patients (50 years of age or older) in need across the region. Subsequently, another research objective is to identify and address underlying factors causing senior citizens to be the lowest number of registered donors in Montgomery County, Ohio, in fact, across the state. This information will assist in future public education efforts of organ and tissue donation when targeting the "baby boomer" population into senior citizenship.

Summary Background Data: The number one problem in transplantation today is the critical shortage of organ availability. Approximately 98,000 patients in the U.S. are registered on the National Transplant Waiting List to receive the gift of life. The organ shortage is partially attributed to the lack of legal designations to be an organ donor on the part of each citizen in Ohio, as well as, the rest of the nation. On July 1, 2002, Ohio activated new legislation for designating an individual's decision to be an organ donor at the time of his or her death. The "Ohio Donor Registry (ODR)" is a first person consent law which is intended to honor the decision of a legal adult (>18 years old, mentally competent, holding a valid driver's license or state identification card and social security number) who wishes upon their death to donate organs, tissues, and/or corneas without the need for family consent; thus, easing the burden on the family at such a devastating time, that being the loss of a loved one. Perhaps the organ shortage could be aided by an increase in the general population's registration in the ODR, particularly the lowest numbered group of registrants, age greater than or equal to 65 years.

Methods: Through a project called "Seniors for Organ Donation Awareness (SODA)", targeting

6 of 16 senior citizens centers of Montgomery County, Ohio, it is hoped that outreach and education will aid the disparity of older registrants in the Ohio Donor Registry. A one hour presentation will be scheduled and provided to the 6 senior centers at no cost. Pre and Post presentation Knowledge Assessment Surveys will be completed by attendees to measure the effectiveness of the presentation's content and to ascertain if the information (including personal testimony from a local donation/transplantation volunteer) is enough to motivate attendees to move into the action phase of decision making by registering to be a donor. Educational literature will be created and distributed to the senior centers and, also, utilized during the on-site presentation. Individuals not registering the day of the presentation will have the option to mail in the registration to the SODA preceptor up to two weeks post the day of the event. After receiving these registrations and collecting the data, the preceptor will send the registrations on to the State BMV in Columbus, OH in order for the donor designations to become active in the Ohio Donor Registry database. **Results:** The highest score possible on the Pre and Post Knowledge Assessment Surveys knowledge based question portion was 8; one point for each right answer. Knowledge scores were summed by the project preceptor and recorded for each participant. For this sample set, using a two tailed t-Test: Paired Two Sample for Means with a level of significance at alpha = 0.05, results give a p-value of 0.009764. This is strongly significant; post presentation Knowledge Assessment Survey scores were significantly higher than the pre presentation Knowledge Assessment Survey scores. This indicates that learning took place by those attending the SODA presentation. This means that educational opportunities in the area of organ and tissue donation for senior citizens does make a difference and could result in an increase of available organs for transplant from expanded criteria donors. The six new registrants in the Ohio Donor Registry as a result of the SODA project are not reflected in the

data from the State of Ohio's reports. The 4.92% registration rate from the SODA project is independent and reflects that the implementation of the project could be successful in increasing the overall registration rate for the state.

Conclusions: As for the surveys, the return rate of 25.61% is high enough to suggest that the results could be indicative of the entire senior citizen population of Montgomery County, OH. The statistical results gathered from the survey knowledge scores suggest that education and outreach to seniors is definitely warranted and can be effective in increasing this age group's donor designations in the Ohio Donor Registry. As a result of the SODA project, 6 new donors (meaning: not currently registered as of last license/state identification card renewal period) were added to the Ohio Donor Registry.

Increasing the Enrollment of Senior Citizens (Age 65 Years and Older) in the Ohio Donor Registry

The number one problem in transplantation today is the critical shortage of organ availability (Conesa, 2003; Haustein, 2004; Howard, 1999; Oh, 2000). Over 98,000 patients in the U.S. are registered on the National Transplant Waiting List to receive the gift of life (OPTN, 2007). The organ shortage is partially attributed to the lack of legal designations to be an organ donor on the part of each citizen in Ohio, as well as the rest of the nation. Perhaps the organ shortage could be aided by an increase in the older population's registration in the ODR, particularly the lowest numbered group of registrants, age 65 years and older (Stratta et al., 2006).

Through a project called "Seniors for Organ Donation Awareness (SODA)", targeting 6 of 16 senior citizen centers of Montgomery County, Ohio, hopefully, outreach and education will aid the disparity of older registrants in the Ohio Donor Registry. A one hour presentation is scheduled and provided to the 6 senior centers at no cost. Pre and post presentation knowledge surveys will be completed by attendees to measure the effectiveness of the presentation's content and to ascertain if the information (including personal testimony from a local donation/transplantation volunteer) is enough to motivate attendees to move into the action phase of decision making by registering to be a donor. Educational literature will be created and distributed to the senior centers and also utilized during the on-site presentation. Individuals not registering the day of the presentation will have the option to mail in the registration to the SODA preceptor up to two weeks post the day of the event. After receiving these registrations, the preceptor will send the registrations on to the State BMV in Columbus, OH in order for the donor designations to be active in the Ohio Donor Registry database.

Literature Review

The number one problem in transplantation today is the critical shortage of organ availability (Conesa, 2003; Haustein, 2004; Howard, 1999; Oh, 2000). Currently, approximately 98,000 patients in the U.S. are registered on the National Transplant Waiting List to receive the gift of life. Of those patients, nearly 3,000 reside in Ohio. Therefore, the need for organ donors peaks higher than ever before. The organ shortage is partially attributed to the lack of legal designations to be an organ donor on the part of each citizen in Ohio, as well as the rest of the nation. On July 1, 2002, Ohio enacted legislation called the Ohio Donor Registry (ODR). The ODR has changed the consent process in the state. The decision for an individual to donate at the time of death is no longer the family's choice if the individual legally registered his or her decision when receiving a driver's license or state identification card, registering by enrollment form or online. If the individual is not registered, upon their death the family is put on the spot, as they were prior to the ODR, to make the donation decision for their loved one. More often than not, a family in crisis (as many of these families are at the time of their loved one's death) tends to react negatively toward the idea of donation and to refuse consent for donation (especially if their loved had never talked to their family about their last wishes) (HRSA News, 2007).

Many past researchers have explored possible reasons for individuals not making the decision to donate. These reasons include, but are not limited to, age, gender, geographic location, education level, exposure to transplantation/donation, and religious beliefs. Myths like "I won't receive the same life saving measures as a non - donor if I legally register to donate", and "I won't be able to have an open casket funeral", fuel the lack of registrations, as well. As for the issue of age, researchers suggest that as people get older, they are less likely to legally

register to be an organ donor (Perkins, 2005; Port, Merion, Goodrich, & Wolfe, 2006). The decline in registrations begins as early as the population in their 40's and continues a constant dive through the older population. Perhaps the organ shortage could be aided by an increase in the older population's registration in the ODR, particularly the group with the smallest proportion of registrants, those age >65 years (Stratta et al., 2006). Grafts from older individuals (>65 years) are not proven to be inferior to those from younger individuals (<40 years) (Oh, 2000). In this day and age, acceptance for donation has no age maximum (or minimum) for organ donation (Stratta et al., 2006). It is strictly a case by case scenario. In the summer of 2006, there were reports of a 92 year old organ donor! Even if the person is not in perfect health, the expanded criteria donor is now acceptable (Oh, 2000). Perhaps the organ can be used in someone who is older or not a perfect candidate for transplantation of a younger organ. Testing is performed prior to the surgical recovery process ensuring the viability of the graft or grafts (Oh, 2000). Older people need to understand that they, too, can be a hero and save lives through organ donation.

In reviewing studies that focus on the lack of legal donor designations from the following researchers, Conesa, Frutos, Haustein, Howard, Oh, Perkins, Port, Sander, Thompson, Williams, and Wolters, the enrollment of older organ donors seems to be a viable step toward eliminating the disparity between those patients in need and the availability of grafts from deceased donors to save them. Basically, each one of their studies found a direct correlation between registering to be an organ donor and an individual's experience or education on the topic of donation and/or education level achieved during their lifetime. The researchers also suggest that age is a primary determinant of an individual's decision to donate (Conesa, 2003; Haustein, 2004; Howard, 1999; Port et al. 2006). Each researcher touched on the issue of age at some point, stating their

hypothesis and/or results from their studies. Another common hypothesis among this group was the need for primary healthcare providers' involvement in promoting their patients to register for organ donation (Conesa, 2003; Howard, 1999; Frutos, 2005).

After reviewing all the studies, some gaps existed in the literature. While most author's hypothesized that increased public education and healthcare provider involvement would make a significant difference in the number of donor designations, some hypotheses suggested focusing on psychosocial factors of groups and the understanding an individual's comprehension of brain death as areas needing to be addressed when educating the public and increasing donor designations (Conesa, 2003; Frutos, 2005). There were also discrepancies among the findings with regard to gender and the influence of that particular characteristic on the willingness of an individual to be a registered organ donor.

The studies included geographic areas from United States (Ohio, Alabama, Southwest U.S., and Florida) to the Murcia region of Spain. Participants were randomly selected and voluntarily participated in these studies. The methods used by the researchers most frequently were telephonic, mail oriented, and face to face interviewer surveys. These surveys generally assessed personal attitudes about donation, education or knowledge of the subject, religious preferences, and attitudes about death and dying. (It is noted that not all of these studies focused on a specific age group. However, 50% were specific to persons age >44 years. Survey profiles from all the studies did indicate similar reasons for being or not being a registered organ donor regardless of age.)

The studies reflected these researchers' findings to be uniform with regards to the significance of ethnicity and donor designations. The Euro - American population, or Caucasian population, does indeed register to be donors and accept the practices of donation significantly

more so than African Americans. This result is interesting due to the abundant need for kidney transplantation and other organ grafts in the African American community as opposed to other ethnic groups. Surprisingly, one researcher reported Hispanic Americans to be even more pro donation than the Euro American population. Health Resources and Service Administration (HRSA) announced through the 2005 Gallup Organization's survey that among U.S. racial and ethnic groups, Caucasians most likely to indicate donation on their driver's license (61%), followed by Hispanic Americans and Asians (both at 39%) and African Americans the least likely (31%) (HRSA News, 2007).

Another commonly reported outcome among this review of studies was a positive attitude toward organ donation among the respondents of the surveys, but a conversely disproportionate number of those people registering to donate. Perhaps this is an indication that action is the step people have a problem with; physically registering to be a donor, rather than not having access to or knowledge of organ donation and the processes associated with donation. HRSA's Gallup survey shows more Americans than ever (>90% reported) are aware of the importance of organ donation and are taking action. Yet the percentage of Americans actually registered to donate their organ is a mere 53% (HRSA NEWS, 2007).

Seniors tend to think of themselves as ineligible to donate due to age, illness, and other self - diagnosed factors (Conesa, 2003). The truth is they are just as eligible as anyone else to donate (Perkins, 2005). Therefore, it is imperative to understand the obstacles of their negative action (refusing to register) to the issue and begin outreach to that particular population. Interventions have been done in Europe to engage this same age faction and many of those include registries like Ohio has now (Haustein, 2004; Howard, 1999). The registries show a small increase in the number of donors above age 55 and over, but there was not statistical

evidence (at $P < 0.05$) suggesting a significant positive impact in registration numbers among senior citizens due to these interventions. Many of these registries provide the option to opt out legally, rather than to opt in legally. Opt in legal registries could be an indicator of the lack of senior citizen's registrations in Ohio or the U.S. as a whole; the senior population may believe their decision cannot be altered at any point once they legally register their donation decision (Scott, 2006).

In the Middle East, religion played a factor in seniors' enrollment, especially if they were very religious and did not know what the stance of their faith was on the issue of donation at the time of death (Shaheen, 2004). Seniors need encouragement, like anyone else, to seek information from their loved ones, physicians, and social support arenas, if there is to be a difference made in the senior population's enrollment as organ and tissue donors in the Ohio Donor Registry (Shaheen, 2004; Scott, 2006; Cravedi et al., 2006).

In conclusion of this literature review, it is apparent that increased registration from all Americans regardless of age, gender, ethnicity, etc. is necessary to ending the crisis happening in transplantation due to the lack of organ donors. The literature does support this researcher's hypothesis that older people (seniors) could make a huge difference in the disparity between the need for transplantation and the lack of donation; especially in the area of liver and kidney transplantation (Oh, 2000; Stratta et al., 2006). Focused efforts should be aggressively targeting this particular group with the life saving message of organ and tissue donation.

Research Hypothesis

A targeted informational awareness program about organ and tissue donation to senior citizens (age >65 years) in Montgomery County, Ohio will produce an increase in the number of registered organ donors in the Ohio Donor Registry, hence, allowing more available organs for

transplant for patients in need across the region. Subsequently, another research objective is to identify and address underlying factors causing senior citizens to be the lowest number of registered donors in Montgomery County, Ohio, in fact, across the state. This information will assist in future public education efforts of organ and tissue donation when targeting the up and coming "baby boomer" population into senior citizenship.

Future Goals of the "SODA" Project

1) Ultimately, if this pilot project displays favorable results, further outreach efforts will extend beyond Montgomery County, Ohio and into the other 22 counties of Life Connection of Ohio's (the local organ procurement organization for northwest and west central Ohio) service area.
2) If the pilot project results are favorable, program offerings can extend beyond senior centers to other senior oriented community groups.
3) If the pilot project is successful, the project's preceptor would like to apply for state and/or federal grant monies to extend the project throughout Ohio

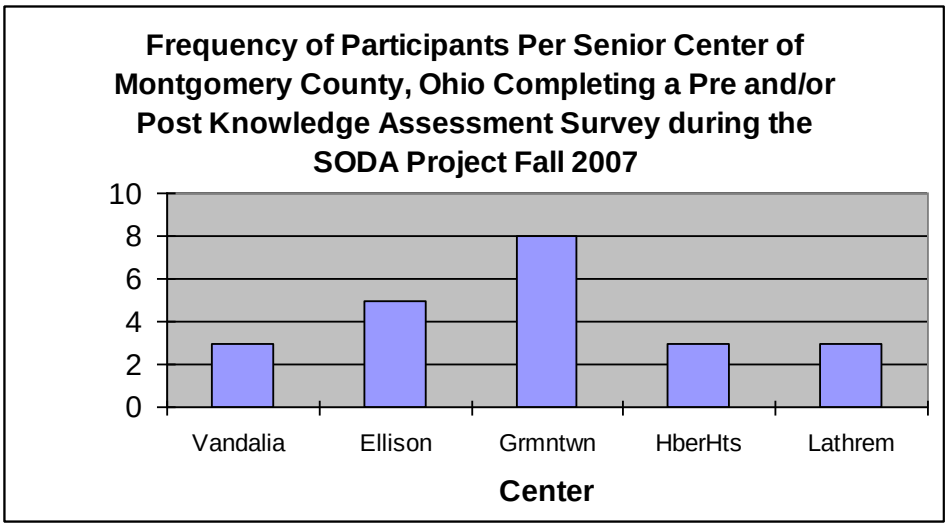
SODA Project Results/ Data Analysis

Six senior centers of Montgomery County, Ohio participated in the SODA Project during October 2007. A total of 122 senior citizens were present for the SODA presentation. Due to time and setting constraints, only five of the centers were offered the Pre and Post Knowledge Assessment Surveys. The surveys included both attitudinal and knowledge based questions. Of those 82 participants at the five centers where surveys were offered, 21 participants completed both the Pre and Post Knowledge Assessment Surveys completely and correctly. Out of the five centers where participants were asked to complete the surveys, the return rate for participants completing the Pre Knowledge Assessment Survey was 26.83%; the return rate for participants

completing both Pre and Post Knowledge Assessment Surveys was 25.61%. Based on these Pre and Post Knowledge Assessment Surveys, the following data was gathered:

Below, Chart 3.1 represents the frequency of Pre and Post Knowledge Assessment Surveys completed per SODA presentation site.

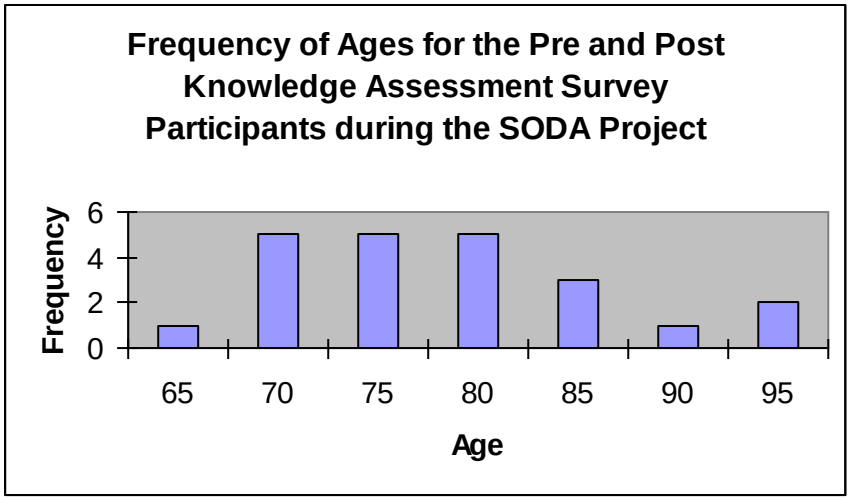
Chart 4.1



Demographics

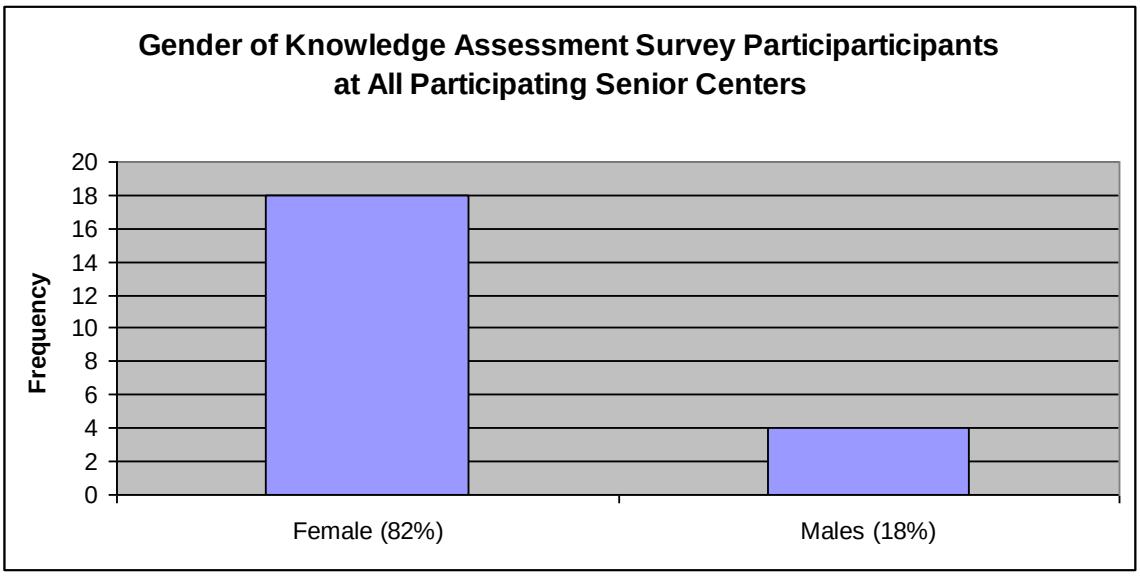
The mean age of participants completing the surveys was 76.32 years of age and the standard deviation was 7.8217. The median age was 75 years. The minimum age of survey participants was 65 years of age and the maximum was 93 years of age. The range was 28. See Chart 4.2 below for the frequency for ages of those who participated in the Pre and Post Knowledge Assessment Surveys.

Chart 4.2



The gender data of survey participants is below in Chart 4.3. Females participated in greater numbers on the pre and post knowledge assessment surveys as compared to males. Each SODA presentation exhibited the same trend; more females attended the events than males (82% and 18% respectively). The gender ratio of all SODA attendees is unknown because gender was only recorded for the participants completing Pre and Post Knowledge Assessment Surveys.

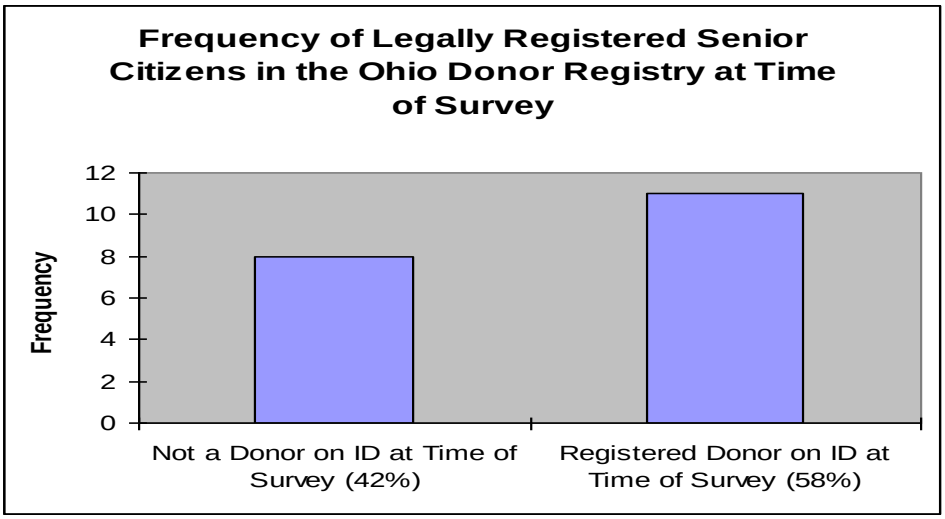
Chart 4.3



Attitude Questions Results

Based on Pre Knowledge Assessment Survey answers from the attitude based question portion, the following data of Chart 4.4 indicates donor status of survey participants who are eligible to register in the Ohio Donor Registry (i.e., having a valid Ohio driver's license or state identification card) prior to the SODA presentation.

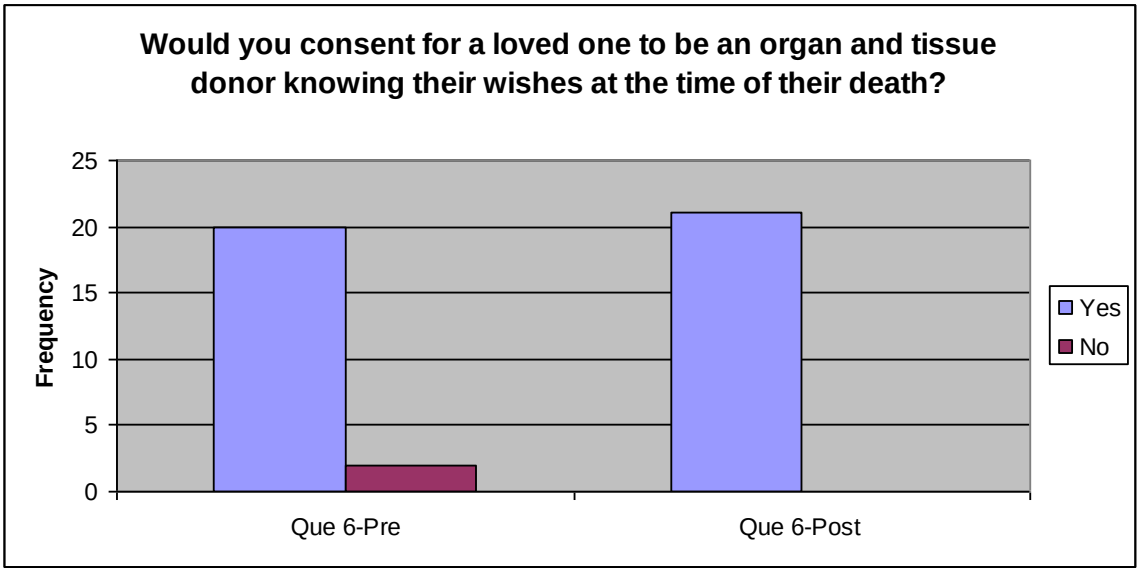
Chart 4.4



Question #6 on the Pre and Post Knowledge Assessment Survey concerns the attitude of senior citizens toward giving consent for a loved to donate if they knew their loved one wished to be a donor by either being legally registered or simply having expressed that wish to them at some time. After the SODA presentation, every participant indicated that they would consent for a family member to donate if their wishes were to do so at the time of death, as indicated in Chart 4.5. This outcome is extremely important because it demonstrates the importance of individual's discussing their donation decision with their family members; when a family is unsure of what their loved one would have wanted regarding consent for donation, they will often decline for their loved one to donate. Families have so many other decisions to make and

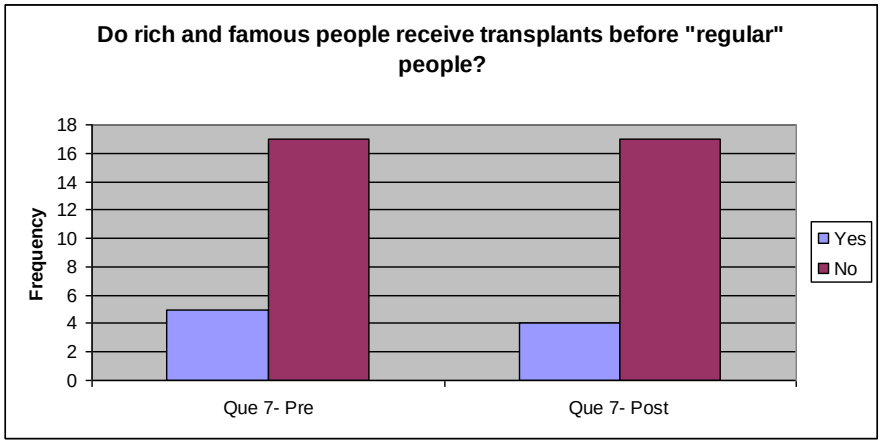
issues to deal with when a loved one dies, the donation decision becomes more of a burden for them than the realization that it is a life saving opportunity their loved can provide to others.

Chart 4.5



The attitude based question #7 on the Pre and Post Knowledge Assessment Survey addresses the widespread misconception that rich and famous people get preferential treatment and are given more favorable status and outcomes by the organ and tissue donation community. There was a slight improvement in the participants' attitudes about this issue from before to after the SODA presentation. However, there are still 4 participants who felt that rich and famous people get transplants before other patients. For individuals who take issue with this, education can often aid in changing that attitude or belief. For some people, this is a point that is hard to change their attitude about, regardless of education or anything else. The problem is that this can keep individuals from registering as organ donors. During the SODA presentation, it is important for the preceptor to mention well known people who have not received the gift of life in time and died waiting for a transplant due to the lack of organ donors in the U.S. Also, stressing that annually the U.S. Transplant community performs over 28,000 organ transplants helps people understand that many patients who are not rich and famous people receive the gift of life.

Chart 4.6



Knowledge Questions Results

Based on the answers from participants from the knowledge question portion of the Pre and/or Post Knowledge Assessment Surveys, the following data indicates the knowledge base of participants about organ and tissue donation increased from the information presented during the SODA project.

Chart 4.7

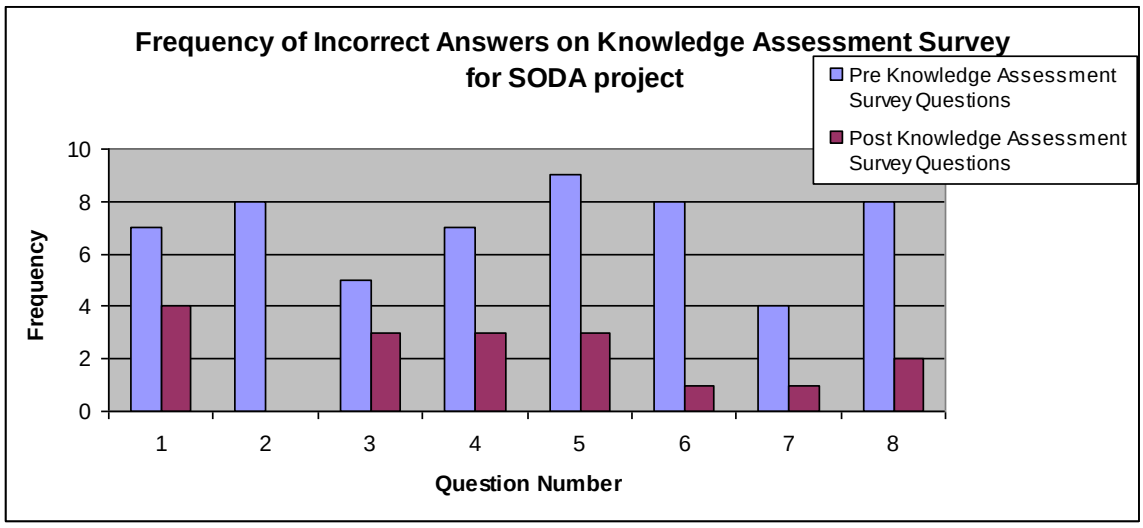


Table 4.1

SODA Project Pre / Post Survey Knowledge Questions	Correct Answer	# incorrect pre-test	# incorrect post- test
1. People of all ages can donate organs and tissues.	T	7	4
2. It is possible to have an open casket funeral if a person is an organ and tissue donor.	T	8	0
3. Your medical care will suffer if you legally register as an organ and tissue donor.	F	5	3
4. One organ donor can save the lives of up to 8 people.	T	7	3
5. Renal (kidney) transplants are the most needed type of transplant in the U.S.	T	9	3
6. Approximately 150,000 senior citizens have to go on dialysis for kidney failure each year in the U.S.	T	8	1
7. My religion does not permit organ and tissue donation.	F	4	1
8. Diabetes prevents a person from becoming eligible to be an organ and tissue donor.	F	8	2

Chart 4.7 and Table 4.1 show the frequency of incorrect answers for the knowledge question portion of the Pre and Post Knowledge Assessment Surveys. Knowledge question #5 was the most frequently missed question on the Pre Knowledge Assessment Survey; 9 out of 21 participants initially answered this question incorrectly. The Post Knowledge Assessment Survey demonstrates only 3 out of the 21 participants answering this question incorrectly; participants learned that renal transplants are the most needed type of transplants in the U.S. based on the SODA presentation.

There were three questions having 8 incorrect answers on the Pre Knowledge Assessment Survey; questions 2, 6, and 8.

The Post Knowledge Assessment Survey results show all participants were able to answer question #2 correctly post the SODA presentation. This is notable because not being able to have an open casket funeral is one of the most frequently stated myths in the organ and tissue donation field from the public; it is one of the most frequent reasons people give for not joining the Ohio Donor Registry. If that was a concern for the participating seniors in attendance, the

post knowledge assessment surveys prove the myth was dispelled from the information provided. As for question #6, the Post Knowledge Assessment Survey results show only 1 person still answered the question incorrectly. This question is poignant because senior citizens need to recognize that people in their age group are in need of transplant, hence, the need for their donations since the older dialysis patients will most likely be listed to accept only expanded criteria organ donors; senior citizens age 65+ are considered expanded criteria organ donors. Question #8 refers to whether having diabetes prevents an individual from being an eligible organ donor. Initially, 8 of the 21 people answered this incorrectly before hearing the SODA presentation. Post Knowledge Assessment Survey results show a knowledge increase by 6 people. This question is included in the survey to address the fact that senior citizens commonly believe that because they have a certain disease or ailment, they are not eligible to donate; a belief that is unfounded and with education can be corrected.

Surprisingly, question #1 did not result in a 100% knowledge attained outcome; after the presentation, 4 people still answered this incorrectly. This is a statement that is stressed by the project preceptor throughout the SODA presentation; perhaps, the attendees had personal reasons for answering "false" on the post knowledge assessment surveys or it could be that the project preceptor wasn't seen as a trusted professional on the issue. The SODA preceptor will take this issue into consideration when presenting in the future.

Question #3 refers to the widespread misconception throughout the public that legally registering as an organ donor will cause an individual's medical treatment to undermine their well being based on the great need for organs for transplant in the U.S.: this particular misconception is addressed in the content of the SODA project presentation. Pre Knowledge Assessment Survey results indicate that 5 out of the 21 participants answered that registering as a

donor would, in fact, cause their medical treatment to suffer. Post presentation surveys show a slight decrease in the belief, but 3 participants still saw this as an issue; meaning it could potentially keep those individuals from legally registering as an organ donor in Ohio or other states.

Question #7 is included in the Pre and Post Knowledge Assessment Surveys because the issue of religion often comes up when individuals consider their own mortality and end of life wishes: the statement was made during each presentation to indicate that all major western world religions support and encourage organ and tissue donation as a person's last act of love and kindness to others on Earth or as an individual's personal choice. If a question about a certain religion's perspective on donation was asked of the presenter, the individual was directed by the presenter to consult their specific faith leader on the subject. Prior to the SODA project presentation, 4 Survey participants answered question #7 incorrectly; post the presentation, only 1 answered the question incorrectly.

One of the most critical questions asked on the surveys is question #4 referring to the difference one organ donor can make in the lives of others. One organ donor can save the lives of up to 8 people. The Pre Knowledge Assessment Survey results exhibited that 7 participants answered this incorrectly. Post the SODA presentation, only 3 people answered incorrectly. In general, people do not realize how much of a difference they can make by being an organ and tissue donor; in addition to the 8 lives being saved through organ donation, one tissue donor can save or enhance the lives of up to 75 people and one cornea donor can give up to 2 people the gift of sight. Senior citizens need to know that they can leave a lasting legacy for others and their families: they are given hope by realizing they are still useful in society. Also, senior citizens should realize that being an organ and tissue donor is often a great comfort for a family; knowing

that even in death, their loved one was a hero who saved and changed lives helps families through the grieving process when losing a loved one.

The highest score possible on the Pre and Post Knowledge Assessment Surveys knowledge based question portion was 8; one point for each right answer. Knowledge scores were summed by the project preceptor and recorded for each participant. For this sample set, using a two tailed t-Test: Paired Two Sample for Means with a level of significance at alpha = 0.05, results give a p-value of 0.009764. This is strongly significant; post presentation Knowledge Assessment Survey scores were significantly higher than the pre presentation Knowledge Assessment Survey scores. This indicates that learning took place by those attending the SODA presentation. This means that educational opportunities in the area of organ and tissue donation for senior citizens does make a difference and could result in an increase of available organs for transplant from expanded criteria donors.

SODA Project Ohio Donor Registration Results

As a result of the SODA project, 6 participants legally registered as organ and tissue donors in the Ohio Donor Registry.

Chart 4.8

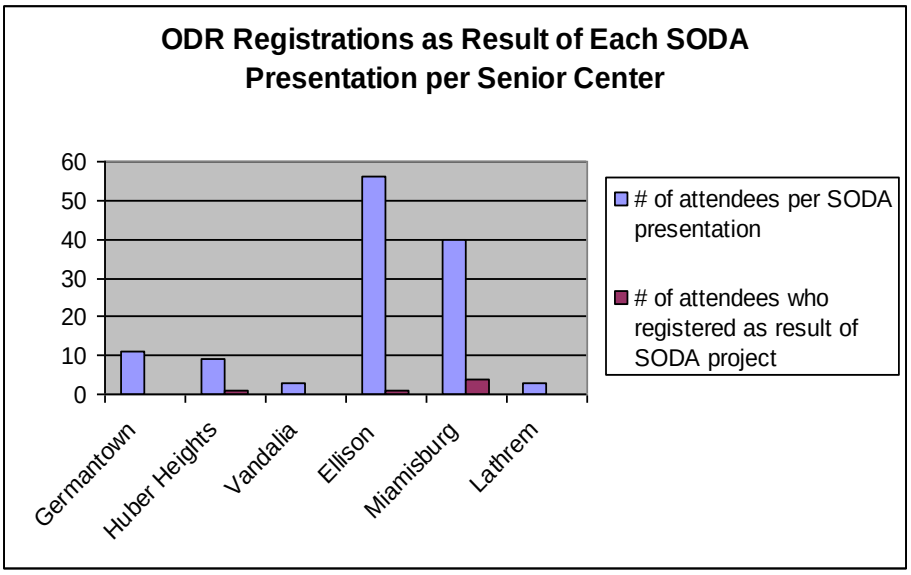


Table 4.2 describes the registration rates of senior citizens (age 65 years and over) of Montgomery County, Ohio for October 2007 from the State BMV records and the SODA project. Of those attending the SODA presentations, the registration rate is 4.92% as opposed to the rate of those registering when receiving or renewing a driver's license or state identification card, 4.56%.

Table 4.2

	total number	total new donors	
Mont. Co. Oct 2007 65+ registrants	1,249	57	4.56%
SODA Project 2007 65+ registrants	122	6	***4.92%***

The six new registrants in the Ohio Donor Registry as a result of the SODA project are not reflected in the data from the State of Ohio's reports. The 4.92% registration rate from the SODA project is independent and reflects that the implementation of the project could be successful in increasing the overall registration rate for the state.

Discussion

All six senior centers of Montgomery County, OH approached by the SODA preceptor participated in the project. The senior centers did vary in length of time given for the program. Initially, the site preceptor offered the program as 1 hour and 30 minutes in length. None of the centers approached agreed to that time frame. The contact at each center expressed that their members would not sit through an hour and a half presentation. The longest presentation ran one hour and the shortest was 45 minutes (although it was scheduled for 30 minutes). The site preceptor found more favorable results with the participants at the presentations when there was a meal (lunch) or snack offered along with the program.

As for the surveys, the return rate of 25.61% is high enough to suggest that the results could be indicative of the entire senior citizen population of Montgomery County, OH.

Although, this is a pilot study, useful information was still gathered from the surveys. Some participants expressed that they couldn't see the typed print in 12 point font, some indicated no prior knowledge on the subject and opted out of the survey portion of the presentation, and others simply did not want to fill out the survey: it was not an issue of incompetence or fear of identification breach, it was a lack of enthusiasm for this particular aspect of the program. No attendees expressed a lack of understanding as to how to fill out the survey portion of the presentation. Future presentations (2008 and in years beyond) will not necessarily include the survey portion of the SODA project presentation. If a survey is included, perhaps using an interview style survey approach would be beneficial to the project preceptor(s) when gathering this kind of data with this specific age group.

The statistical results gathered from the survey knowledge scores suggest that education and outreach to seniors is definitely warranted and can be effective in increasing this age group's donor designations in the Ohio Donor Registry.

As a result of the SODA project, 6 new donors (meaning: not currently registered as of last license/state identification card renewal period) were added to the Ohio Donor Registry. Although there was a mail-in option going straight to the site preceptor, no one sent in a registry enrollment form to her. If an individual sent an enrollment straight to the address on the registry enrollment form, the site preceptor is unaware and has no way of knowing that information. In Ohio, reports sent to the local OPO each month describing the number of new license issues and donors from those issues does not reflect enrollment forms sent in by an individual; only those donor registrations from the various license branches at the time of an individual's new issue or renewal are reflected.

References

Conesa, C. (2003). Psychosocial profile in favor of organ donation. *Transplantation Proceedings, 35*(4), 1276-1281.

Cravedi, R. G., et al. (January, 2006). Long Term Outcome of Renal Transplantation from Older Donors. *New England Journal of Medicine. 354*

Frutos, M. (2005). Multifactorial snowball effect in the reduction of refusals for organ procurement. *Transplantation Proceedings, 37*(9), 3646-3648.

Fries, J. (2000). Compression of morbidity in the elderly. *Vaccine, 18*(16), 1584-1589.

Gabel, H. (2003). Donor registries throughout Europe and their influence on organ donation. *Transplantation Proceedings, 35*(3), 997-998.

Gnant, M. F. X., Wamswer, P., Geotzinger, P., Sautner, T., Steininger, R., & Muehlbacher, F. (1991). The impact of the presumed consent law and a decentralized organ procurement system on organ donation: Quadruplication in the number of organ donors. *Transplantation Proceedings, 23*(5), 2685-2686.

Haustein, S. (2004). Factors associated with (un)willingness to be an organ donor: importance of public exposure and knowledge. *Clinical Transplantation, 18*(2), 193-200.

Howard, R. (1999). How can we increase the number of organ and tissue donors? *Journal of the American College of Surgeons, 188*(3), 317-327.

HRSA News. (2007, February 7.) "U.S. Public is Taking Action to Support Organ Donation, Gallup Survey Finds". Retrieved from www.organdonor.gov/survey2005 on February 9, 2007.

Jacobbi, L. (1997). Increasing the Donor Pool: Recovery of Hearts From Older Donors. *Transplantation Proceedings, 29*(8), 3297-3298

Kennedy, I., Sells, R. A., Daar, A. S., et al. (1998). The case for "presumed consent" in organ donation. *Lancet*; *351*, 1650-1652.

Matesanz, R., & Miranda, B. (2000). Expanding the organ donor pool: The Spanish model. *Kidney International, 59*, 1594.

Matesanz, R., Miranda, B., Felipe, C., & Naya, T. (1996). Continuous improvement in organ donation. *Transplantation, 61*, 1119-1121.

N.A. (n.d.). Spain leads world organ donors' league table. People's Daily Online. Retrieved on June 13, 2007 from http://english.people.com.cn/

Oh, C. (2000). Implication of advanced donor age on the outcome of liver transplantation. *Clinical Transplantation, 14*(4), 386-390.

Perkins, H. (2005). Exploring chronically ill seniors' attitudes about discussing death and postmortem medical procedures. *Journal of the American Geriatrics Society*, *53*(5), 895-900.

Port, F., Merion, R., Goodrich, N., & Wolfe, R. A. (2006). Recent trends and results for organ donation and transplantation in the United States, 2005. *American Journal of Transplantation*, *6*(5 Pt 2), 1095-1100.

Schutt, G. (2002). 25 years of organ donation: European initiatives to increase organ donation. *Transplantation Proceedings*, *34*(6), 2005-2006.

Scott, D. (January- February, 2006). Pas Bring Gift of Life to Patients through Organ Donation. *UNOS Update*, *30*(2).

Shaheen, F. (2004). Increasing organ donation rates from Muslim donors: Lessons from a successful model. *Transplantation Proceedings*, *36*(7), 1878-1880.

Stratta, R. J., Rohr, M. S., Sundberg, A. K., et al. (2006). Intermediate-Term Outcomes with Expanded Criteria Deceased Donors in Kidney Transplantation. *Annals of Surgery, 243*(5), 594-603.

Rodriguez, M., Scheffler, R. M., & Agnew, J.D. (2000). An Update on Spain's Healthcare System: Is It Time for Managed Competition? *Health Policy, 15*(2), 109-131. Retrieved on April 17, 2007 from http://www.linkinghub.elsevier.com

The Organ Procurement and Transplantation Network (OPTN). Main page (22 April 2007). Available at: http://www.optn.org

Appendix A

SODA: Seniors for Organ Donation Awareness

Pre- Knowledge Survey

Today's Date:_____

Senior Center: _____

Age on Last Birthday: _____

Gender (circle one): Male Female

For the following questions, please circle "Y" for "yes" and "N" for "no".

1) Have you ever received information on organ and tissue donation? Y N

2) Do you have a valid driver's license or state i.d. card? Y N

3) When receiving your most recent license or state i.d. card, did you indicate you wanted to be an organ donor when you were asked if you wanted to be an organ donor by the BMV employee?

Y N

4) Do you know what the Ohio Donor Registry is? Y N

5) Have you discussed your donation decision, whether you want to be a donor or do not wish to be a donor, with your family? Y N

6) Would you consent for a loved one to be an organ and tissue donor if you knew that was what your loved one had wanted at the time of his or her death? Y N

7) Do you think rich and famous people receive organ transplants before others who are also waiting? Y N

For the following questions, please circle "T" for "true" and "F" for "false".

1) People of all ages can donate organs and tissues. T F

2) It is possible to have an open casket funeral if a person is an organ and tissue donor.

T F

Please turn over to continue

3) Your medical care will suffer if you legally register as an organ and tissue donor. T F

4) One organ donor can save the lives of up to 8 people. T F

5) Renal (kidney) transplants are the most needed type of transplant in the U.S.

T F

6) Approximately 150,000 senior citizens have to go on dialysis for kidney failure each year in the U.S. T F

7) My religion does not permit organ and tissue donation. T F

8) Diabetes prevents a person from becoming eligible to be an organ and tissue donor.

T F

Thank you and enjoy the presentation!

Appendix B

SODA: Seniors for Organ Donation Awareness

Post- Knowledge Survey

Senior Center: _____

Age on last birthday: _____

Gender (circle one): Male Female

Date: _____

For the following questions, please circle "Y" for "yes" and "N" for "no".

1) Have you ever received information on organ and tissue donation?

Y N

2) Do you have a valid driver's license or state i.d. card? Y N

If your answer was "N" on question 2, please move on to question 4.

3) When receiving your most recent license or state i.d. card, did you indicate you wanted to be an organ donor when you were asked if you wanted to be an organ donor by the BMV employee?

Y N

4) Do you know what the Ohio Donor Registry is?

Y N

5) Have you discussed your donation decision, whether you want to be a donor or do not wish to be a donor, with your family?

Y N

6) Would you consent for a loved one to be an organ and tissue donor if you knew that was what your loved one had wanted at the time of his or her death?

Y N

7) Do you think rich and famous people receive organ transplants before others who are also waiting?

Y N ***Please turn over to continue***

For the following questions, please circle "T" for "true" and "F" for "false".

1) People of all ages can donate organs and tissues.

T F

2) It is possible to have an open casket funeral if a person is an organ and tissue donor.

T F

3) Your medical care will suffer if you legally register as an organ and tissue donor.

T F

4) One organ donor can save the lives of up to 8 people. T F

5) Renal (kidney) transplants are the most needed type of transplant in the U.S.

T F

6) Approximately 150,000 senior citizens have to go on dialysis for kidney failure each year in the U.S.

T F

7) My religion does not permit organ and tissue donation. T F

8) Diabetes prevents a person from becoming eligible to be an organ and tissue donor.

T F

9) Respond to the following statement by circling one number that best indicates your feelings.

After hearing the presentation, I am willing to become an organ and tissue donor by registering in the Ohio Donor Registry.

Less Willing 1 2 3 4 5 6 7 More Willing

Thank You!